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HENRY R. O'BRIEN

EAST OR WEST OF SUEZ, THE DRESS IS A BASE FOR THE JEWELRY

When she comes to market from her home in the Kentung hills, this daughter of the Kaw tribes of Burma (page 5) wears a wooden carrying yoke. For adornment she adds ornate necklaces and headdress. Her dress, a background for the jewelry, might be called "basic" by Western fashion experts.

Poles Have Known 1,000 Years of Turbulence

POLAND'S recent general election opened a new chapter in the national life of a people who have known a thousand years of turbulent change and upheaval, including total eclipse and political rebirth. As a historic buffer and bridge between the Teutonic west and Slavic east, Polish territory has expanded and contracted like an accordion.

Its present boundaries—awaiting final decisions of the peace treaties with Germany—are vastly different from those which existed before World War II. In the west, the line drawn in accordance with the Big Three agreement at Potsdam gives to Poland Silesia and other former German areas as far as the Neisse and Oder rivers, plus the major share of German East Prussia. To the Soviet Union, in the east, is left a broad band of former Polish land east and south of prewar Lithuania.

New Resources within New Boundaries

Today's Poland is a little larger than New Mexico. Its area of roughly 125,000 square miles is about one-sixth smaller than that covered in 1939. Its population of 24,000,000 is 10,000,000 fewer, a drop attributable partly to the Germans' systematic destruction of its people, and partly to the loss of areas going to Russia.

Although Poland has lost land and people, the newly acquired territory has provided new resources. The western advance of the boundary has introduced an area of heavy-industry cities in a country long noted for peasant farm villages (illustration, page 4). The districts of Upper and Lower Silesia provided Nazi Germany with its second-ranking mining and industrial region, rich in coal and iron, dotted with manufacturing centers, and crisscrossed by transportation lines.

Poland reached its greatest extent during the 16th century when union between Polish and Lithuanian dynasties stretched its domain from the Baltic to the Black seas. Then came decline, followed in the last decades of the 18th century by annihilation through partition, as Prussia, Russia, and Austria divided the Polish lands between them.

Independent Poland reappeared on the map of Europe after World War I. Its long background of patriotic struggle was made romantic by such figures as the soldier-statesman Kościuszko (illustration, page 2), famed also for his part in the American Revolution, and the celebrated composer Chopin, who requested that his heart be returned to Poland for burial. Paderewski, world-noted pianist, was the first premier of the nation revived in 1918.

Polish Corridor Divided Prewar Germany

The boundaries of the new republic were not settled until 1923, after conflicts involving neighboring Germans, Ukrainians, Czechs, and Lithuanians. Incorporated were a number of controversial territories that kept the issues of the Polish border boiling.

One was the "Polish Corridor," which gave Poland an outlet to the sea by separating East Prussia from the rest of Germany. Another was

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COURTESY GDYNIA-AMERICA LINE

KOŚCIUSZKO, POLISH AND AMERICAN HERO, IS REMEMBERED IN MARBLE ON KRAKÓW'S WAWEL HILL

In this battlemented 14th-century castle-cathedral are buried Poland's great. Kościuszko helped General Washington in the American fight for freedom before returning home to throw the foreign shackles from his own land. Poland's independence did not last long, as Kościuszko was captured and imprisoned by Russia—one episode in a long history of ups and downs (page 3).

Burma to Choose New Political Status

THE meeting in London of British and Burmese representatives to discuss the British offer of full independence for Burma adds another name to the list of Far Eastern lands changing their forms of government in the postwar era.

The daily news through nearly four years of the war made familiar to Western ears place names formerly known chiefly through the verse of Rudyard Kipling. War changed Mandalay from a popular song to a military objective; Burma's golden-spired temples became as familiar to American soldiers as was the old Moulmein pagoda to Kipling's "soldiers of the Queen" in earlier conflicts.

Burma's Elephants Are Trained to Work

Burma spreads over 261,600 square miles—an area a little larger than California and Oregon combined. Its population of 17,000,000 is about double that of the two Pacific coast states.

Burma has long ranked as one of the most prosperous colonies in Asia. Before World War II it was the world's leading rice exporter, and an outstanding timber source. In the deep forests work elephants moved teak logs, highly prized for hardness and durability.

For centuries Burma's ruby mines have given the world the most valuable of the cherished blood-red gems. Its less beautiful but perhaps more necessary minerals include lead, silver, tungsten, and tin. It produces more petroleum than any other Far Eastern country.

To this vestibule between China, French Indochina, Siam, and India, World War II brought widespread damage. Somewhat offsetting this were many new transport lines built to serve military needs. After the Japanese cut off the famous Burma Road, American engineers built the spectacular Ledo Road (renamed in honor of General Stilwell) across the high passes of northern Burma. To the south, the Japanese built rail connections leading to interior Siam.

Scenery Combines Characteristics of Tropics and Orient

High mountains, deep river gorges (illustration, page 6), jungles, drought, and flood made Burma a savage war front. The climate, however, is more moderate than that of many other tropical countries, due to the north-south-running mountain ranges. Because of this physical feature, a cool north wind blows from October to May.

Burma's soil is fertile and its scenery strikingly beautiful. Dazzling blue skies and lush vegetation are a vivid backdrop for the pageantry of yellow-robed Buddhist priests (three-quarters of the population is Buddhist), howdah-ed elephants, villagers—both men and women—decked with ornate necklaces and headdresses of silver and costumes of long-sleeved jackets and baggy trousers or draped sarong-like skirts. In the fertile lowlands golden-spired temples and bamboo houses on stilts rise from a shimmering expanse of rice fields.

Peacetime sportsmen hunted such big game as tigers, leopards, elephants, rhinoceroses, wild boars, and the Himalayan and Malayan bears.

Most Burmese live in the highly cultivated river valleys of Lower

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the Polish share of Upper Silesia, and still another was the former Lithuanian city of Vilnyus (Wilno, Vilna) and its environs, whose loss the Lithuanian government had refused to concede.

When the Germans dismembered Czechoslovakia, the Poles took over the Czech portion of Cieszyn (Teschen), one of the contested areas from Austrian Silesia which earlier had been divided between the two nations. This gain, however, was soon swallowed up by the German attack on Poland. When the Russians advanced from the east, the "Land of the White Eagle" was once more wiped out by partition.

The partition line disappeared for a while as the Germans poured across that frontier to invade the Soviet Union, only to be rolled back in time by the tide of defeat. The line then became the eastern boundary of Poland, with Russia keeping the Pinsk marsh and forest tracts and the densely populated areas around Vilnyus and Lvov (Lwow).

NOTE: Poland appears on the Society's Map of Central Europe and the Mediterranean.

For further information, see "Pedaling Through Poland," in the *National Geographic Magazine* for June, 1939*; "The Poland of the Present," March, 1933; and "Poland, Land of the White Eagle" (12 color photographs), April, 1932.

See also, in the GEOGRAPHIC SCHOOL BULLETINS, February 5, 1945, "Kraków, Long Poland's Capital, Was Education Leader." (*Issues marked with an asterisk are available to teachers in packets of ten for $1.00.*)

IN PEASANT VILLAGES LIKE POPUW LIVES THE FARMING BACKBONE OF POLAND

This one-street town of snug thatched cottages stands near the prewar German border. Parts of near-by Silesia present entirely different landscapes of mines, factories, and industrial cities.

Platt, Oklahoma's Mineral-Spring Oasis

LIKE an oasis, Platt National Park provides a hilly haven of shade trees, clear-running streams, and cool mineral springs in the plains of south-central Oklahoma. Among its 31 major springs, 18 are classed as sulphur, six as fresh water, four as iron, and three as bromide. All are cold water.

Hot Springs National Park, in adjoining Arkansas, and Platt are the only two areas in the national park system that were set aside for their mineral waters. The park service assures the free distribution of the fluid to all comers, but makes no claims as to its curative qualities and provides no consultants. The waters should be used extensively only on the advice of competent physicians.

Was a National Park Before Oklahoma Became a State

The Indians knew of the medicinal properties of the spring water long before the white man appeared. In great numbers they came to drink. Often the banks of the streams were dotted with tepees. The area is still an often-used meeting place for American Indians, one-third of whom live in Oklahoma.

In 1902 Congress, to preserve the mineral waters, established the Sulphur Springs Reservation in what was then the Indian Territory. Four years later, one year before Oklahoma became a state, the area was named Platt National Park in honor of the Indians' friend, Senator Orville H. Platt of Connecticut. It is the smallest national park, measuring only about three miles long.

Sylvan Travertine Creek (illustration, page 8) has its source near the eastern end of the park and, fed by many springs, winds and tumbles to its junction with Rock Creek. Just to the south, Bromide Hill, a steep wooded bluff, rises 140 feet high. "Robbers Roost," the summit, is reached by trail and road. The principal mineral springs of the park flow from the base of this hill.

Near where Rock and Travertine creeks join is the main entrance from the town of Sulphur, which adjoins the park on the north. Hotels, swimming pools, bathhouses, and other facilities are found in the town. Three campgrounds and a picnic area are located at scenic spots in the park. Summer is the principal season, though the park remains open all the year.

Bromide Hill Commands Extensive View

From Pavilion Springs, Medicine Spring, and Bromide Spring issue the best-known waters. Two natural springs, Buffalo and Antelope, are the sources of Travertine Creek. They flow about 5,000,000 gallons a day. They were named for the animals that once roamed the area in herds and came to the springs to drink. A section of the park, fenced off, now serves as a buffalo range.

An eight-mile circuit drive gives motorists a comprehensive view of the park scenery. From the top of Bromide Hill, the ancient, low-lying Arbuckle Mountains can be seen across the intervening Washita River

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Burma where, unlike people of most Asiatic countries, they raise enough food for themselves and for export. There is little of the extreme poverty seen in China and India. Sugar, peanuts, and tobacco supplement the extensive rice export.

In the mountains of Upper Burma live Nagas, Chins, and Kachins, many of whom helped the Allies in jungle warfare against the Japanese. In the right angle of east Burma live Kaws (illustration, cover), Shan tribesmen, and the Karens whose Padaung women stretch their necks swanwise with brass rings. In Rangoon, the capital, the Indian element is strong. About half of the city's half-million are Indians.

Burmese women hold high position for the Orient, having equal property rights with men and sharing many of their occupations. They are lawyers and doctors, and sometimes a woman is "headman'" of a village.

Before 1937, Burma was governed as a province of India, with some sections under native chiefs. Separation gave the Burmese a special status in the British Empire, with a certain measure of self rule.

NOTE: Burma is shown on the National Geographic Society's map of India and Burma. Write the Society's headquarters, Washington 6, D. C., for map price list.

For additional information, see "Stilwell Road—Land Route to China," in the *National Geographic Magazine* for June, 1945; "Aerial Invasion of Burma," August, 1944*; and "Burma: Where India and China Meet," October, 1943*.

FRANK OUTRAM

TWO ENDS OF A MOUNTAIN TRAIL ARE TIED TOGETHER BY A BURMA BRIDGE

Where the eastern edge of Burma loops over into China's Yunnan Province, and rivers gouge deep gorges in the steep forested mountains, this mule bridge ties together the ends of a trail broken by a river. Across the fragile wooden span, swung between two square stone gatehouses, a string of pack mules makes its way, picking the exact center of the bridge for safety.

Spitsbergen Sits on Top of the World

THE majestic, coal-veined mountains that form the Norwegian islands of Spitsbergen, where the Soviet Union is reported seeking bases, rise from Arctic waters almost literally at the top of the world.

The group, officially known as Svalbard, is only 700 miles from the North Pole. It lies just 400 miles north of Norway's North Cape (Nordkapp). The northern part of Greenland is 280 miles to the west. The Soviet Union's Franz Josef Land juts from the Arctic Sea about 220 miles to the east.

Most Northerly Land Where People Live All Year

Despite their seemingly inhospitable location, the islands are by far the best-favored climatically of any land so far north. The January and February mean temperature varies from zero to eight degrees below zero Fahrenheit—only slightly lower than thermometers register at Leningrad, 1,250 miles south.

In fact, Spitsbergen is the northernmost land in the world on which people live the year round. A warm current from the North Atlantic washes the western shores and moderates the climate. Longyear City (Longyearbyen, illustration, page 10), with a population of about 550, is the largest of six coal-mining towns.

The islands are one of the few Arctic regions that have supplied minerals to countries in the temperate zone. Deposits of iron, copper, and zinc are largely undeveloped, but the vast coal resources—estimated as high as eight billion tons—have been mined for a half century. Gypsum is also of economic importance.

Coal mining is comparatively simple because the veins often crop out on the mountain sides. The long summer hours of "midnight sun" also help production. Although mining continues throughout the year, the coal can be shipped abroad only from June or July until October, while harbors are ice-free.

Norwegian and Russian miners and their families have constituted virtually the entire population of this land the size of West Virginia. In prewar winters the number of residents usually dwindled to little more than 2,000.

Named for Pointed Mountains

The frugal, hard-working people augment their larders by fishing. Once Spitsbergen waters were the world's greatest whaling grounds, but the catches were so extensive that whales and walruses have become nearly extinct in the region. A few polar bears and seals remain.

Few of Spitsbergen's mountains are more than a mile high, but their sharp spires or cones, glittering with snow and ice, make the islands scenically beautiful. The name Spitsbergen means pointed mountains. It was bestowed on the islands by William Barents and Jacob Heemskerk, Dutch navigators, who rediscovered them in 1596. Four centuries before, the Vikings had sighted the group and called it Svalbard, "Land of the Cold Coast." Norway reverted to the older name when an international agreement in 1920 gave the Scandinavian kingdom undisputed possession.

valley to the southwest.

First-time visitors to Platt learn that its springs are merely one link in a chain of unusual geographic features that stretch across southern Oklahoma. Starting from the east, these landmarks are the extensive Ouachita Mountains, Platt National Park, the Arbuckle Mountains with their waterfalls, and the Wichita Mountains, one of the oldest ranges in the United States.

NOTE: Platt National Park in shown on the Society's Map of the United States.

ALLAN RHINEHART—COURTESY NATIONAL PARK SERVICE

"I CHATTER OVER STONY WAYS, IN LITTLE SHARPS AND TREBLES, I BUBBLE INTO EDDYING BAYS, I BABBLE ON THE PEBBLES"

Tennyson could almost have had Travertine Creek in mind when he wrote "The Brook." This clear-running stream, a runaway from mountain regions, traverses Oklahoma's Platt National Park.

ANCIENT FERRY SERVICE CONTINUES DESPITE BRIDGES AND TUNNELS

The old ferry which for many years connected coastal highways at the southern end of the Norway-Sweden border has been replaced by a bridge. Rising 200 feet over Svine Sund, it is described as the highest bridge in Europe.

In spite of bigger and better bridges in such cities as New York, San Francisco, and London, ferryboats continue in daily operation. Curaçao's oil port of Willemstad, for example, is so active that its pontoon bridge is open much of the time to admit tankers, making ferry service necessary. Whites Ferry, crossing the Potomac within 35 miles of Washington, D. C., has recently resumed service.

Ferryboats were a gradual development. Early American Indians used rafts made of bundles of reeds, twigs, or logs. In Colonial times barges usually were used, though often coaches were ferried across rivers in parallel canoes, while the horses swam. In the great western trek in the late 1840's, as many as 200 wagons are known to have lined up at ferry crossings.

South America's many ferries developed unusual customs. Though a traveler in Peru might choose to swim across a stream, he still had to pay the boatman a fee. Ferrying from Rio de Janeiro to Niteroi, Brazilian passengers fully shod paid half again as much as those who crossed barefooted.

Nature Rampages in Misnamed Pacific

MAGELLAN, first European to sail across the Pacific Ocean, found it peaceful and stormless and so gave it its misleading name. Recent storms and volcanic action affecting three vastly different and widely separated Pacific islands—Palmyra, Akutan, and Luzon—proved that the western sea has its share of violence.

Palmyra is a tiny atoll 1,100 miles southward from Honolulu where more than 100 U. S. Navy men and a few scientists weathered a storm like "The Hurricane" of Charles Nordhoff and James Norman Hall, which covered nearly the entire island with thunderous waves.

Palmyra Rises Only Six Feet above Sea Level

More than 50 islets make up Palmyra's land total of 250 acres. They are links in the five-mile-long horseshoe-shaped platform of coral and hard sand that encloses three separate lagoons. Largest islands, Cooper, on the north, and Eastern, on the east, cover less than 50 acres each. Cooper reaches an elevation of six feet above sea level, the highest point in the atoll.

Ocean waves normally break at the outer edge of the coral platform, and people "aboard" Palmyra can wade the shallows between islets. Tides raised by heavy storms, however, can sweep across the land as though it were a ship's deck.

Dense vegetation of palms and pandanus trees covers most of the land. To ships at a short distance, the palms appear to grow right out of the ocean. Gulls, gannets, terns, and frigate birds find haven there. Unique in the crab family is the atoll's coconut crab, which climbs palm trees and eats coconuts.

Whaling ships often sought the atoll's limited shelter in the early 19th century. One of the earliest visitors was the American ship *Palmyra* in 1802. At various times thereafter, the tropical pinpoint was claimed for the United States, for Great Britain, for the one-time Hawaiian kingdom, and by private individuals for themselves.

By 1936, the transoceanic phase of air transport had arrived, and the United States raised the Stars and Stripes over Palmyra, prospective way station on the New Zealand air route.

Akutan Aleuts Had Novel Whaling Methods

Akutan, the Aleutian Island where a volcano recently erupted, was a great whaling center until the discovery of petroleum gradually curtailed the demand for whale oil.

A century and more ago there were seven settlements along Akutan's coast with more than 600 Aleut residents. Today, only one native village remains. The Aleuts were whale hunters who for generations had pursued the whale in primitive fashion, their wooden lances tipped with blades of volcanic glass or stone. The whale was not killed by the lances but by poison on the blades.

The whale would "sound" upon being struck and would seek the lower depths of the north Pacific. When it died and later was cast up on the shore, it became the property of the killer, who was identified by the lance.

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The Soviet Union ratified the treaty in 1925.

Many fjords indent the shores, and glaciers fill valleys and often run down into the fjords themselves. Two-thirds of Vest (West) Spitsbergen, largest of the five islands and numerous barren, rocky islets that make up the group, is covered with ice all year. There are no trees, but hardy flowers blossom quickly in midsummer.

Spitsbergen's comparatively moderate climate and its proximity to the North Pole have made it an ideal base for Arctic exploration. From Kings Bay, Rear Admiral Richard E. Byrd and Floyd Bennett took off in 1926 to become the first to fly over the North Pole.

NOTE: Spitsbergen (Svalbard) is shown on the Society's Map of the Northern and Southern Hemispheres.

For further information, see "Flights from Arctic to Equator," in the *National Geographic Magazine* for April, 1932; and "A Woman's Winter on Spitsbergen," August, 1928.

MARTHA PHILLIPS GILSON

"THE LONG ARCTIC NIGHT" IS NO MERE MYTH TO LONGYEAR CITY'S CITIZENS

Like chessmen marching downhill to the sea, wooden frames support an overhead cable that bears buckets of coal from the mine on a Spitsbergen mountainside down to the dock where the coal boats load. Longyear City huddles between the bleak mountain and the waters of Advent Bay. Its people get used to unusual light conditions—the icy glare of springtime noon, the dimmer light of the midnight sun, and, from October to March, the complete darkness of the Arctic night. Longyear is the largest of Spitsbergen's half-dozen mining camps, each of which has its radio station and post office.

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Akutan Island is nine miles northeast of Unalaska Island. Its volcano rises to a peak 4,100 feet high. Thirty years ago, about eight minutes apart, bomblike explosions from within rocked the island.

Mt. Mayon Called Philippine Fujiyama

Mt. Mayon, on southeast Luzon, largest of the Philippine Islands, has a wide reputation as the most perfect volcanic cone in the world. Its recent violent eruption may have impaired its symmetrical lines near the summit.

The volcano rises 7,943 feet from an almost level plain at the edge of the Pacific Ocean (illustration, below). It is often called the Philippine Fujiyama. Its junction with the plain is a near-circle of 120-mile circumference.

At least 30 times since 1800, Mayon has erupted. A town on the site of present-day Daraga was wiped out in a few minutes in 1814, along with 1,200 lives. Legaspi, at Mayon's base, exports abacá (Manila hemp).

NOTE: Akutan and Palmyra islands may be located on the Society's map of the Pacific Ocean and the Bay of Bengal, Mt. Mayon on the map of the Philippines.

See also, in the Geographic School Bulletins, April 1, 1946, "Elusive Islands Come and Go as the Earth Quakes on Forever."

SHAPED LIKE A MALAY'S HAT, MAYON VOLCANO RISES SYMMETRICALLY FROM THE PACIFIC SHORE

Since its recent eruption, the Philippine peak may be more truncated. Two flyers reported that they saw the summit swell "like a bubble," then break. Mayon has no true crater. It normally lets off steam through fissures. Legaspi, southern Luzon port, lies in foreground.